

ART. IX.—*Coloured Prismatic Crystals in Blood-Globules.*

By BENJAMIN S. SHAW, M. D., of Boston.

IN examining blood from the finger, I found coloured crystals within the blood-globules, described by Külliker, as existing in the blood-globules of the spleen, &c., of various animals.

The blood was taken from the finger of a young man of twenty-two years of age, an officer in the army, apparently in perfect health, and who had dined heartily two hours before. It was diluted with an equal quantity of water, and a few drops placed under the microscope. The globules presented the usual appearance at first, but after about one minute, as the fluid began to evaporate, yellowish-red crystals appeared in them, having the form of four-sided prisms, with angles and edges well defined. There was generally one crystal in each globule. In some globules there were two, and these crossing each other. A few free crystals also were seen floating about in the more fluid portion. The globules themselves seemed to have their natural colour, and presented no other unnatural appearance than this. The white globules also were natural and in no excess of numbers.

These crystals have been found by Külliker and Funke in the blood of the splenic vein, and in the spleen substance in many animals; also, in the *Cereæ furciatilis*, in the blood of the liver, kidney, and heart. They have, until recently, been seen only when a few drops of blood have been evaporated on a glass; but Funke has now succeeded, with great difficulty, in obtaining them in large quantities by the action of water and alcohol through membranes. Lehman thinks they are formed by the union of an albuminoid and a mineral substance, since they present, with the usual reagents for albumen, the same results as albumen.

ART. X.—*Sequel of a Case of Saccharine Diabetes.* By CHARLES FRICKE, M. D., of Baltimore.

IN the number of this *Journal* for July, 1852, I reported a case of saccharine diabetes, at that time under my care, with tabular observations of its pathology, and the results of treatment. The patient since that time has died; and I have thought that a brief notice of the subsequent course of his disease, and the results obtained by a *post-mortem* examination, might be interesting.

The amount of urine passed by him increased gradually, although still

influenced to some degree by medicinal agents, and reached its greatest amount December 5. On that day, he passed eight hundred and ninety-six ounces, equivalent to fifty-six pints, or seven gallons. And the amount of sugar contained in this enormous quantity of fluid was estimated at four pounds ten ounces. He was at this time very weak and emaciated, but not confined to the hospital. During the fall, he suffered much from abscesses on the shoulder and backs of his hands; but after the invasion of cough, from which previously he had been exempt, their appearance ceased. The pus from these abscesses always contained sugar.

On December 30, he entered the hospital, complaining of cough. A few slight râles were discoverable in the right lung, but nothing else. His urine had now diminished to two hundred and sixty ounces daily. During the next week, his cough became troublesome, and some rudeness of respiration was discoverable. On the 17th of January, bronchial respiration and bronchophony were well marked throughout the upper third of the right lung, and a few days afterwards the rusty expectoration of pneumonia made its appearance. At this time he lost his relish for farinaceous food, and confined himself principally to meat. At this date some blood was taken from him by cups, but a careful examination could detect no sugar in it, although this substance was still present in his expectoration. He died January 26; the quantity of urine decreasing daily. On the 25th, he passed but one hundred and thirty ounces, containing only four ounces of sugar.

The following table is made up of the averages of sixty-seven examinations:—

Date.	Average number of analyses.	Quantity of urine in ounces.	Quantity of sugar passed in grains.	Quantity of sugar in food, in grains.	Medicine taken.	Stools.
From March 6 to April 4	5	570	14,790	25,500	{ Ergot grs. iij; Strych. ʒ	3
From April 6 to May 4	9	448	12,123	25,500	None	2
From May 5 to May 17	7	545	17,447	25,500	{ Creosote grt. ij. twice daily	3
From Aug. 15 to Dec. 5	13	752	23,379	27,976	None	3
From Dec. 12 to Jan. 17	24	226	6,394	11,080	Morphia ʒ	3
From Jan. 17 to Jan. 26	9	157	4,191	10,212	None	1

Autopsy, ten hours after death. Body very much emaciated. On opening the thorax, the two upper lobes of the right lung were found to be consolidated from tubercular infiltration, and a pneumonia which had passed into the second stage. On cutting into its substance, two or three recent cavities, filled with pus, varying in size from a pea to a small marble, were discovered. In other respects, these organs were healthy. The liver was of its natural size and appearance. The kidneys one-fourth larger than usual, rather flabby,

but not congested. All the other abdominal organs presented their natural appearance. The bladder contained about 5vj of clear urine, but no sugar could be detected in it.

The blood from the hepatic vein, from the right and from the left side of the heart, was examined with a view of detecting sugar. In the first only was it at all perceptible. Thus: the blood was first dried, then boiling alcohol added, and filtered; this evaporated, and the residue dissolved in distilled water. To this Barreswil's liquor was added, and by boiling a slight canary tint was made evident.

BALTIMORE, March 3, 1853.

ART. XI.—*Mode of Reducing Dislocation of the Thumb.* By JOHN DOE, M. D., of Cabot, Vermont.

HAVING had occasion to reduce a dislocation of the thumb several times, when the first phalanx is thrown upon the dorsum of the metacarpal bone, and having never encountered any particular difficulty in effecting it, it has been a cause of surprise to me that the method I am now to describe is not more generally known. There is not an English writer on Surgery, from Sir A. Cooper to Fergusson, nor an American one, so far as I know, that alludes to this method; and, if we are to judge from an article by M. Demarquay, published in the *Medical News*, of May, 1852, and accredited to the *Bulletin de Thérapeutique*, it might well be presumed that the French are also innocent of practising or teaching it.

The common method of reducing this luxation is, as is well known, to flex the thumb, fasten upon it a tape with a clove nitch, and with this make extension. If this, or more violent means do not succeed, we are directed either to abandon the attempt at reduction, or what is still worse, effect it by making incision, or by amputation of the end of the metacarpal bone. Extension has sometimes been persevered in to such a degree that the soft parts have been lacerated, or the thumb actually torn off; and in *Braithwaite's Retrospect*, part xxii., M. Blandin describes a forceps well calculated to do this.

In this dislocation, the phalangeal end of the metacarpus projects into the palmar surface of the hand, forcing itself between and through the flexor muscles of the thumb, which form a loop around the head of the bone. Extension made upon the thumb makes this loop more tense; and, as the metacarpal end of the first phalanx is broad and considerably flattened on its palmar aspect, it must be apparent at once that the difficulty of reduction is directly as the amount of extension. There is good reason to believe that extension would never succeed in these cases without rotation. The principal indication in treatment here, is to relax the flexors forming the loop, so that the